How Government Can Modernize and Meet Federal Data Mandates Faster

CIOs and CDOs can improve outcomes to the public—and avoid disrupting data interdependencies—by harnessing new enterprise data intelligence tools.

By FedScoop Staff

Government agencies are straining daily to modernize their information management systems and make more effective use of their data. One factor that complicates those efforts—and routinely goes underestimated is the task of assessing exabytes of data moving across government's sprawling IT networks and then adapting those data streams for the cloud age, without disrupting critical work.

Federal agencies have made major strides toward adopting cloud-based infrastructure and software services into their IT operations. However, officials continue to face a host of practical challenges around their data.

Foremost among them: cataloging the nature, value and trustworthiness of the data they create; knowing where their data actually resides; and understanding how it flows and is transformed from one application/system to another, who's using it and how. That's not to mention dealing with an unprecedented rate of growth in the volume and complexity of all data—or how best to secure it. Adding urgency to those initiatives: the <u>OPEN Government Data Act</u> and the <u>Foundations of Evidence-Based</u> <u>Policymaking Act</u>, signed into law in January of 2019, and the <u>Federal Data</u> <u>Strategy</u> action plan, issued by the Office of Management and Budget in June. Agencies must now meet new mandates to standardize and share their data, including requirements to:

- Make federal data available publicly by default—and in formats the public can readily use.
- Maintain a comprehensive inventory of datasets—cataloging the data assets agencies create, collect, control or maintain for public use.
- Make administrative records accessible electronically—for the purpose of developing evidence and insights on the efficacy of programs and policies.
- Prioritize leadership on data quality and use—to provide governance and direction for developing and using data and ensuring data quality over its lifecycle.
- Assess data engagement capacity—to gauge and develop an agency's capacity to engage in data management and analysis activities.
- Extend data privacy and risk practices—expanding efforts to protect the privacy of confidential information and coordinate disclosure policies.
- Manage government data as a strategic asset—giving external users the means to access and use government data for research and commercial purposes and internal stakeholders the ability to use data to improve decision-making and accountability.

Brace for Impact

To accomplish those mandates and continue modernizing coherently, agency leaders—including the chief data officers now being appointed under the new law—need a more comprehensive view of their data estate, according to Ian Rowlands, director of product marketing at ASG Technologies, a global provider of enterprise information management software.

That means not only knowing the structure and meaning of an agency's data assets. "It also requires a deeper understanding of your agency's data-flow. How your data is processed. What services is it supporting? Who are the interested stakeholders? And how is it deployed and transformed across platforms—that's critical," Rowlands said.

"When you consider a modernization project, you have to be able to draw lines around a portion of the application portfolio and a portion of a data portfolio

Multi-System Dilemma: Where Enterprises Maintain Their Data

Enterprise leaders recognize the importance of bringing together their organization's structured and unstructured information into a unified environment. New tools make it easier to find and connect assets on separate Enterprise Data Management (EDM), Enterprise Content Management (ECM) and other IT systems.

	Enterprise Data Management	Enterprise Content Management	Other System
Customer's protected information	53%	28%	23%
Customer transactions	48%	33%	21%
Email/correspondence	46%	38%	28%
Customer contracts/ Statements of work	44%	29%	26%
Workflow documents	44%	35%	25%
IT operational data/log files	42%	28%	26%
Employee data	41%	34%	28%
Sensor or IoT data	39%	24%	19%
Product information/ schematics	39%	32%	26%
Web content	39%	36%	27%
Corporate inventory/stock	37%	33%	18%
Legal documents	36%	33%	29%
Marketing/sales collateral	36%	37%	23%
Photos, video and graphics	33%	38%	27%
Social media collateral	33%	29%	26%

Source: Enterprise Information Management: Dawn of the Great Convergence (ASG Technologies & Forbes Insights)

and say, 'This is the group of things that we need to move,' carry out an impact analysis exercise and make sure things don't get broken," Rowlands said.

Before unplugging or moving applications, added Wayne Monk, ASG Technologies' senior vice president of global alliances and channel sales, "it is imperative to do an impact analysis—to understand where every critical data resides in the landscape, from source to consumption, and map how the data travels, to clearly see what dependencies your data has prior to any modernization efforts."

Monk cited the example of how one enterprise customer had estimated it had likely stored taxpayer ID information in 20 or more locations across its systems. After using ASG's Data Intelligence solution, officials at the organization discovered that information was actually being stored in 230 different locations. It reduced that number to 12—and in the process, also reduced a slew of storage, backup resources and other costs while simultaneously improving data quality and trust.

Bridging the Divide

While most enterprises have the tools to manage structured data, only about 1 in 4 large organizations across a range of industries report having formal, enterprise-wide content management systems for unstructured data assets such as documents, videos and images in many different file formats. That's according to a recent study, <u>Enterprise</u> <u>Information Management: Dawn of the</u> <u>Great Convergence</u>, underwritten by ASG Technologies. The study also found:

- Close to two-thirds of executives polled said they are pursuing enterprise information management strategies that incorporate both unstructured and structured assets to modernize their systems.
- 68% of executives said informationdriven decision making is "transforming customer satisfaction and engagement" and "internal operations."
- On average, the annual growth rate for both structured enterprise data and content now exceeds 10% for a majority of organizations.

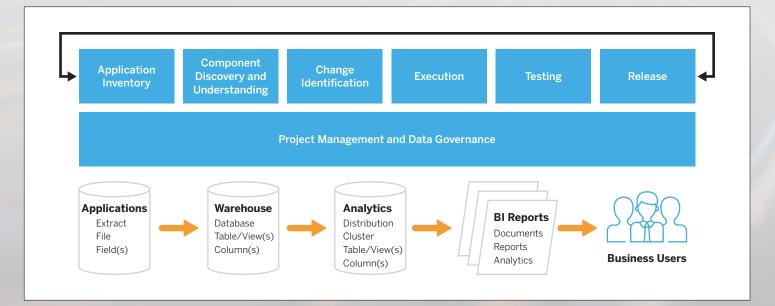
- However, only 33% of executives rated their information delivery infrastructure as "highly effective" leaving many without the platforms needed to realize their vision to use data more holistically to achieve their missions.
- 42% reported that decision makers spend more than an hour, on average, searching for the information they need.

Ragu Gurumurthy, CIO and chief data officer of Deloitte, commenting on the state of enterprise data management and the study's findings, said there are two critical roles both structured and unstructured data are playing in transforming today's enterprises.

"First, there's the effectiveness and efficiency—understanding customers and the ability to understand the financial performance of the (enterprise). Second, there's the value you create using the data exhaust from interactions with your core businesses to create new products or offers," he said.

The Change Analysis Process

Moving data from legacy systems to more modern systems requires a disciplined approach to change analysis to ensure data streams are not disrupted.



Most organizations understand how [insights from] data can fuel efficiency and effectiveness; far fewer understand how to harness data to create new products or services, Gurumurthy added.

In order to capitalize on those potential gains, executives must bridge the divide between their structured and unstructured data management systems.

One key reason stems from the need to manage risk—and ensure that their data complies with a variety of regulatory and data privacy mandates. Another reason is the growing volume of data moving to, or being pulled from, applications outside their traditional repositories and content systems—in particular, machinegenerated data that increasingly drives IT automation and artificial intelligence.

Control Your Data

That's where today's modernized enterprise data intelligence platforms can help, by providing government CIOs and CDOs substantially greater visibility into, and control over which data their agency has, where it comes from and where it resides—on-prem or in multiple clouds.

At the same time, as agencies continue modernizing their IT operations, it's important to look for specific data management capabilities.

For instance, does the platform deliver the kind of comprehensive range of detailed business glossaries and use cases that are necessary to support the unique nature and requirements inherent in managing government data? Additionally, can it can parse and analyze metadata at the speed, scale and complexity that agencies routinely operate at? And can it provide the kind of reporting that builds trust in data-driven outcomes among agency stakeholders?

We believe those capabilities are among the reasons that ASG was recognized once again as an industry Leader in the Most organizations understand how [insights from] data can fuel efficiency and effectiveness; far fewer understand how to harness data to create new products or services. Executives must bridge the divide between their structured and unstructured data management systems.

-RAGU GURUMURTHY, DELOITTE

October 2019 Gartner Magic Quadrant. for Metadata Management Solutions, (authored by Guido De Simoni, Mark Beyer, et al.), according to Rowlands. Gartner recognized ASG for its ability to execute and completeness of vision.

"We have been doing this for better than 30 years, meaning we really know what we're doing with legacy sources often deployed in the federal government as well as modern sources," Rowlands said.

ASG Technologies also has developed advanced solutions that allow agencies to quickly understand the movement and processing of structured and unstructured data across diverse technologies and specifically across multiple platforms, according to Rob Perry, ASG Technologies' vice president of product marketing.

In particular, he pointed to <u>ASG's</u> Mobius Workflow and Mobius Content Services as a powerful suite of nocode/low-code tools that can help agencies leverage their data to automate repeatable and scalable business tasks. Mobius Workflow Designer, for instance, provides users an easy-to-learn platform for assembling embedded workflows that align with ERP, finance, project management and other processes. Mobius Workflow Inbox and Workflow Monitor similarly facilitate nextstep processing tasks and streamline administrative reporting. Collectively, they support a wide range of content types and can scale easily.

"Having the right enterprise data intelligence tools in place can give agencies a powerful leg up in being able to define, manage and track workflows through reports and dashboards to help collaboration teams understand where issues have arisen and how they were being addressed," said Perry.

But perhaps more importantly, it also gives agency leaders a crucial platform to "properly involve multiple stakeholders in the governance of those projects," he said.

Understanding the potential impact of data and application rationalization decisions is crucial to avoiding the perils of "moving from silos of legacy technology only to end up with silos of modern technology," said Perry. And it's equally important to building and sustaining a data-driven enterprise.

Learn more about how ASG Technologies can provide your agency with the enterprise data insights it needs to modernize successfully. <u>www.asg.com/government</u>

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